

AMENDMENT

U.S. PATENT APPLICATION NO. 10/814,131

Response to Office Action Mailed June 6, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1. (Currently Amended) A coaxial line, comprising:

a tubular inner conductor;

an outer conductor;

a plurality of insulating material struts intersecting between the inner conductor and the outer conductor, wherein at least two of the insulating material struts each include a conduit in fluid communication with the inner conductor; and

a plurality of connections for conducting a coolant through the coaxial line,

wherein the ~~inner conductor is configured to~~ conduits permit the coolant to be conducted through the tubular inner conductor .

Claim 2 (Canceled).

Claim 3 (Previously Presented). The coaxial line according to claim 1, wherein the insulating material struts are arranged as tubes which are led outward through the outer conductor.

Claim 4 (Previously Presented). The coaxial line according to claim 1, wherein the insulating material struts are implemented as full disks having radial conduits.

Claim 5 (Currently Amended). The coaxial line according to ~~claim 2~~claim 1, wherein the conduits of the insulating material struts open into a chamber in an inner conductor connecting element at the end of the tubular inner conductor.

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Claim 6 (Previously Presented). The coaxial line according to claim 5, wherein a tube of smaller diameter, which is sealed on its face at both ends, is positioned coaxially in the tubular inner conductor, and wherein the annular space between said tube and the tubular inner conductor communicates with the conduits in the insulating material struts.

Claim 7 (Previously Presented). The coaxial line according to claim 6, wherein the tube is sealed on its face by a flange arranged on the inner conductor connecting element.

Claim 8 (Previously Presented). The coaxial line according to claim 6, wherein the tube is sealed on its face via flanges which are mounted on a particular inner conductor connecting element in an axially and radially floating manner.

Claim 9 (Previously Presented). The coaxial line according to claim 6, wherein the tube has centering elements on its outer circumference which rest on the inner wall of the tubular inner conductor.

Claim 10 (Currently amended). The coaxial line according to claim 9, wherein the centering elements ~~(72)~~ are positioned along a spiral around the tube.

Claim 11 (Currently Amended). The coaxial line according to claim 9, wherein the centering elements include axially extending webs ~~(72.1)~~.

Claim 12 (Previously Presented). The coaxial line according to claim 9, wherein the centering elements are of integral configuration with the tube.

Claim 13 (Currently Amended). The coaxial line according to ~~claim 2~~ claim 1, wherein the tubular inner conductor has axial conduits in its jacket which communicate with the conduits in the insulating material struts.

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Claim 14 (Previously Presented). The coaxial line according to claim 1, further comprising: a plurality of sections which are separately coolable from one another and are connected electrically and mechanically to one another.

Claim 15 (Previously Presented). The coaxial line according to claim 14, wherein the tubular inner conductors of adjoining sections of the line are connectable to one another via complementary plug-in connections.

Claim 16 (Previously Presented). The coaxial line according to claim 15, wherein the complementary plug-in connection includes a flange plate, which terminates the chamber of the inner conductor connecting element and comprises an axially extending first annular shoulder which overlaps a second annular shoulder on a flange plate of an adjoining line section and is in turn overlapped to form a contact by a collar of axially extending contact springs which concentrically encloses the second annular shoulder.

Claim 17 (Previously Presented). The coaxial line according to claim 16, wherein the free ends of the contact springs of the contact spring collar lie in a radial plane which is set back axially in relation to the radial plane containing the face of the second annular shoulder.

Claim 18 (Previously Presented). The coaxial line according to claim 17, wherein the flange plates are screwed to the inner conductor connecting element.

Claim 19 (Currently Amended). The coaxial line according to ~~claim 2~~claim 1, wherein the insulating material struts are led through the outer conductor, the ~~insulating~~ insulating material struts floating in the axial direction.

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Claim 20 (Currently Amended). The coaxial line according to claim 3, wherein the end of each insulating material strut led through the outer conductor is enclosed by a guide flange, which is held in a recess of the outer conductor in a floating manner in the axial direction, is sealed radially elastically in relation thereto, and is in contact radially elastically therewith.

Claim 21 (Previously Presented). The coaxial line according to claim 1, wherein each of the tubular insulating material struts is held tiltable in an axial plane with its inner end in the inner conductor connecting element and with its outer end in the outer conductor wall.